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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,081	11/26/2003	William P. Collins	C-2438	7877

7590 10/18/2005

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49 Arlington Road
West Hartford, CT 06107

EXAMINER	
HODGE, ROBERT W	

ART UNIT	PAPER NUMBER
1746	

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/723,081	COLLINS, WILLIAM P.	
	Examiner	Art Unit	
	Robert Hodge	1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 August 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *12-18* is/are pending in the application.

4a) Of the above claim(s) *12 and 13* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *14-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see Remarks/Arguments, filed 8/15/05, with respect to canceled claims 1-11 have been fully considered and are only persuasive because the claims have been canceled. Therefore the previous objections and rejections are moot.

2. In light of applicant's preemptive arguments of the newly added claims the examiner is not persuaded that the Breault reference does not teach everything therein. Applicant's main argument is that the Breault reference does not teach the specific location of the humidifier. However as can be seen in figure 1 the device used for humidifying is most definitely located in the coolant loop between the heat removal means and the fuel cell stack, and is also operatively connected to the inlet oxidant stream. Furthermore the examiner notes that applicants have admitted on the record that the "interdigitated enthalpy exchange device" of the Breault reference is in fact the same as the "enthalpy exchange barrier" of the present application (see fourth full paragraph of applicant's arguments). Therefore the Breault reference still reads on the newly added claims and further explanation will be made in the below rejection.

3. With regards to the provisional double patenting rejection. Although the applications were filed on the same day, the point of a Terminal disclaimer is not just to keep one similar patent from expiring later than another (i.e. extending its life), it is also to keep them together under one assignee to prevent them from being sold to separate parties, which could then result in litigation between the two parties. And even if there are parts located in different areas of one application versus another application, this

has also been found to be an obvious modification see In re Japikse, 86 USPQ 70. Therefore the provisional double patenting is still found to be proper.

Election/Restrictions

4. Applicant's election of group I claims 1-11, which are now canceled in the reply filed on 8/15/05 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 14-18 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,416,892 hereinafter Breault.

7. Breault teaches a fuel cell power plant comprising a fuel cell stack with the proper inlets and outlets for reactant and coolant fluids, having a heat removal means (or radiator with fan) within the coolant loop and a humidifier that is located between the heat removal means and the fuel cell stack assembly and is connected to the oxidant inlet stream, wherein the humidifier is designed to both cool the coolant and increase the temperature and humidity of the inlet oxidant stream, prior to both streams entering

the fuel cell stack assembly (abstract, figures 1-5, column 2, lines 44-63, column 4, line 37 – column 5, line 10, column 6, line 60 – column 14, line 5). And by applicants own admission the Breault reference teaches the same energy recovery device in the present application albeit the Breault reference calls it a "interdigitated enthalpy exchange device" which has all of the same features of the present invention such as gas and liquid coolant flow chambers, a saturator having the inlet oxidant stream in direct contact with the coolant, as can also be found in the reference starting at column 9, line 44 and ending column 15, line 20.

Double Patenting

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 14 an 16-18 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 13 of copending Application No. 10/723,200. Although the conflicting claims are not identical, they are not patentably distinct from each other because the scope of the

claims in the present application fully encompasses the scope of the claims in copending Application No. 10/723,200. The only main difference is that the scope of the claims in copending Application No. 10/723,200 have been further limited by the addition of a reformer to the system. As previously stated in the Response to Arguments section, relocating the "humidifier" would be an obvious modification

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Hodge whose telephone number is (571) 272-2097. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RWH 10-13-05

MICHAEL BARR
SUPERVISORY PATENT EXAMINER